AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer-readable storage device comprising instructions for causing a processor to:

receive a request to visualize a grid network, the grid network comprising grid managers for managing computational resources ~~running~~ on a plurality of computers functioning as grid nodes, the grid managers operating to route resource requests throughout the grid network, the resource requests being requests for the computational resources from the computers in the grid network; and

generate, in response to the request, a display comprising:

a graph with directional edges and vertices, the vertices representing the grid nodes in the grid network and the directional edges representing hierarchical associations between superior grid managers and inferior grid managers, the superior grid managers routing the resource requests to the inferior grid managers to request the computational resources on the inferior grid managers,

wherein ~~the resource requests are routed within the grid network from the superior grid managers to the inferior grid managers as indicated by~~ the directional edges indicate the routing of the resource requests from the superior grid managers to request the computational resources on the inferior grid managers.

2. (Previously Presented) The computer-readable storage device of claim 1 in which the association is peer-to-peer.

3. (Canceled)

4. (Currently Amended) A computer-readable storage device comprising instructions for causing a processor to perform a method, the method comprising:

displaying a first graphical user interface (GUI), the first GUI comprising:

a graph with vectors and nodes for visualizing a computer grid, the nodes representing computers running grid managers and the vectors representing relations between superior grid managers and inferior grid managers, the vectors pointing from the superior grid managers to the inferior grid managers to indicate routing of resource requests from the superior grid managers to request between grid managers within the computer grid, the resource requests being requests for computational resources from the inferior grid managers computers in the grid network, and

for each node, an expandable structure showing computer grid applications running on a computer represented by the node;[[,]]

receiving, with an event handler, a request identifying one of the nodes in the first GUI; and

displaying a second GUI in response to the request, the second GUI illustrating the grid manager running on the identified node and an inferior grid manager on a node other than the identified node.

5. (Currently Amended) A method comprising:

receiving a request to visualize a grid network with a first node representing a first grid manager from a set of linked nodes, the linked nodes representing computers running grid managers and vectors representing relations between pairs of grid managers;

displaying the first node representing the first grid manager;

sending a first query to the first grid manager requesting an inferior grid manager list of inferior grid managers having an inferior relation to the first grid manager;

receiving a first response from the first grid manager to the first query, the first response including the inferior grid manager list;

displaying nodes corresponding to the grid managers in the inferior grid manager list and drawing a first group of vectors directed from the first grid manager to the inferior grid managers, the first group of vectors indicating that resource requests in the grid network are routed from the first grid manager to request computational resources from the inferior grid managers, the resource requests being requests for computational resources from the computers in the grid network;

sending a second query to the first grid manager requesting a superior grid manager list of superior grid managers having a superior relation to the first grid manager;

receiving a second response from the first grid manager to the second query, the second response including the superior grid manager list; and

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displaying nodes corresponding to the grid managers in the superior grid

manager list and drawing a second group of vectors directed from the superior grid

managers to the first grid manager, the second group of vectors indicating that the

resource requests in the grid network are routed from the superior grid managers to

request computational resources from the first grid manager before being routed to the

inferior grid managers by the first grid manager.

6. (Original) The method of claim 5 further comprising:

sending a third query to each of the grid managers in the first list of grid

managers requesting a third list of grid managers having an inferior relation to each grid

manager in the first list of grid managers;

displaying nodes representing grid managers in the third list of grid managers

and drawing vectors from the grid managers in the second list of grid managers to grid

managers in the third list of grid managers.

7. (Original) The method of claim 6 further comprising:

recursively repeating the steps of sending and displaying for each of the grid

managers in the third list.

8. (Previously Presented) The method of claim 5 further comprising:

sending a query to the first grid manager, the query requesting a list of services

and applications managed by the first grid manager; and

displaying an expandable structure, the display showing the list of services and applications managed by the first grid manager.

9. (Previously Presented) The computer-readable storage device according to claim 1, wherein the vertices display a network address for the corresponding grid node.

10. (Previously Presented) The computer-readable storage device according to claim 1, wherein the vertices display applications currently running on the corresponding grid node.

11. (Previously Presented) The computer-readable storage device according to claim 1, further comprising instructions for causing the processor to generate, in response to user input identifying one of the grid nodes, a display of a grid manager running on the identified grid node.

12. (Previously Presented) The computer-readable storage device according to claim 1, further comprising instructions for causing the processor to generate, in response to user input identifying one of the grid nodes, a display of applications running on the identified grid node.

13. (Previously Presented) The computer-readable storage device according to claim 1, further comprising instructions for causing the processor to generate, in

response to user input identifying one of the grid nodes, a display representing a relationship between a grid manager running on the identified grid node and a grid manager running on another one of the grid nodes.

14. (Previously Presented) The computer-readable storage device according to claim 1, wherein:

the grid managers comprise at least a first tier of grid managers, a second tier of grid managers, and a third tier of grid managers, the first tier of grid managers being superior to the second tier of grid managers, and the second tier of grid managers being superior to the third tier of grid managers, and

the directional edges indicate that resource requests are routed within the grid network from the first tier of grid managers to the second tier of grid managers, and subsequently from the second tier of grid managers to the third tier of grid managers.

15. (New) A computer comprising:

a processor; and

a memory storing instructions for causing the processor to:

receive a request to visualize a grid network, the grid network comprising grid managers for managing computational resources on a plurality of computers functioning as grid nodes, the grid managers operating to route resource requests throughout the grid network, the resource requests being requests for the computational resources from the computers in the grid network; and

generate, in response to the request, a display comprising:

a graph with directional edges and vertices, the vertices representing the grid nodes in the grid network and the directional edges representing hierarchical associations between superior grid managers and inferior grid managers, the superior grid managers routing the resource requests to the inferior grid managers to request the computational resources on the inferior grid managers,

wherein the directional edges indicate the routing of the resource requests from the superior grid managers to request the computational resources on the inferior grid managers.

16. (New) A computer comprising:

a processor; and

a memory storing instructions for causing the processor to:

display a first graphical user interface (GUI), the first GUI comprising:

a graph with vectors and nodes for visualizing a computer grid, the nodes representing computers running grid managers and the vectors representing relations between superior grid managers and inferior grid managers, the vectors pointing from the superior grid managers to the inferior grid managers to indicate routing of resource requests from the superior grid managers to request computational resources from the inferior grid managers, and

for each node, an expandable structure showing computer grid applications running on a computer represented by the node; and

receive, with an event handler, a request identifying one of the nodes in the first GUI; and

display a second GUI in response to the request, the second GUI illustrating the grid manager running on the identified node and an inferior grid manager on a node other than the identified node.

17. (New) A computer-readable storage device comprising instructions for causing a processor to:

receive a request to visualize a grid network with a first node representing a first grid manager from a set of linked nodes, the linked nodes representing computers running grid managers and vectors representing relations between pairs of grid managers;

display the first node representing the first grid manager;

send a first query to the first grid manager requesting an inferior grid manager list of inferior grid managers having an inferior relation to the first grid manager;

receive a first response from the first grid manager to the first query, the first response including the inferior grid manager list;

display nodes corresponding to the grid managers in the inferior grid manager list and drawing a first group of vectors directed from the first grid manager to the inferior grid managers, the first group of vectors indicating that resource requests in the grid network are routed from the first grid manager to request computational resources from the inferior grid managers;

send a second query to the first grid manager requesting a superior grid manager

list of superior grid managers having a superior relation to the first grid manager;

receive a second response from the first grid manager to the second query, the

second response including the superior grid manager list; and

display nodes corresponding to the grid managers in the superior grid manager

list and drawing a second group of vectors directed from the superior grid managers to

the first grid manager, the second group of vectors indicating that the resource requests

in the grid network are routed from the superior grid managers to request computational

resources from the first grid manager before being routed to the inferior grid managers

by the first grid manager.